2: Schaden--39 E-4,5 (1946-1954) 1962 SM4 Guarani SM4

/37 cont./

352 [177] [513] [192] In the cold regions above all the sleeping hammock has practically been abandoned and replaced by the jirau or tarimba /a bed of boards, as in a guardhouse/, the primitive caboclo bed, which is called tupá. Many sleep on the ground, near the fire. The Mbüá of Rio Branco say that they make hammocks of embira only for trading. I saw small hammocks for children or used as seats among the Mbüá of Itariri, made of either timbopeva or embira: they also exist among the caiçaras /caboclos of the coast/, who call them puçás and must have received them from the ancient Tupinambá. The Nandéva of Bananal make small "hammocks" out of cotton cloth, to lull children to sleep.

356 [412] [824] [192] For the visitor the Guaraní house, with very rare exceptions, has two nice touches that deserve special mention. In the first place the relative cleanliness, being swept once or more a day with the tapýtá, a broom made of rosemary or xiriríka. Secondly, the hospitality: the foreigner is immediately invited to sit on the apyká (a little bench made out of a single piece of wood, sometimes zoomorphic among the Mbüá, who call it tendá): if by chance the head of the family is occupying the only stool that he possesses, he will get up and say: "eguapý," sit down!

574 [352] [192] 352 [296] 353 One can hardly speak of furnishings. Tables and chairs are found only as exceptions. The pieces of clothing are usually /38/ hung on the cipó imbé /a kind of cipo/ stretched in the dwelling: only the most progressive ones have a trunk or portmanteau. Inside or outside the house the more industrious ones build a framework of horizontal poles high enough not to be reached by dogs and used for safeguarding provisions and cooking utensils. Everything else is kept in baskets, stuck under the roof, or hung from the beams. On the wall a calender or a print from a calender, a polychrome picture of a saint, or, as in one instance, a large picture of the President of the Republic may show the more or less eager desire to appear civilised.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

IV. CAYUÁ CULTURE: THE PRESENT

SINCE points of acculturational change are primarily stressed in our study, this chapter is limited to matters in which the present Cayuá differ significantly from the past. But, while no complete description is anticipated here, the main outlines of the modern culture of the Cayuá (at Taquapiri, specifically) should nevertheless become apparent.[38] As much as possible, the various aspects of modern culture will be presented in this chapter in the same order as corresponding aspects of the aboriginal Cayuá described in Chapter II. However, where not merely modifications of the aboriginal but clear additions have been made, the earlier sequence cannot be strictly adhered to.

Only *results* of the acculturational process, so it has so far been effective, are discussed here, not the factors of acculturation in the causal sense. Thus, to take a simple case, metal tools and what metal tools mean in the present technology are noted. How the Cayuá obtained these tools, the factor of acculturation in this given instance, is not the question for the moment. To cite another example, it is pointed out that Cayuá agriculture is quite different in a number of respects from what it used to be; for one thing, it has become relatively much more important in the total economy than formerly. But in this chapter the reasons for the transformation are not discussed. The analysis of acculturation in terms of the factors affecting and effecting it, the processes which led to the present culture, will be left for Chapter V. For the moment we are merely interested in what 1943 Cayuá culture looks like, as compared to the old.

ECONOMY

Technology and Material Culture

The most notable technological change from the past is with respect to the adoption of certain metal implements which the Cayuá obtain from the whites. In order of their importance, these metal tools are machetes (usually called by this Spanish name, although Portuguese *facão* is also occasionally used), axes, and hoes (both also called by their Spanish or Portuguese names). The adopted implements are used primarily in agriculture, although they also have other applications. There has been a complete replacement of aboriginal implements formerly used for work which can now be accomplished by these metal tools, and this must have happened a considerable time ago since there are scarcely any traditions of the older tools.[39] The importance of the machete

[38] An ethnographic monograph is being written which will provide many details in which the present paper, for the reason of its particular concern, may be lacking.

[39] One informant—not an elder—told the writer that he had heard that in the old days some sort of stone axes and hoes were used, but he didn't know what kind of "machete" there might have been. Probably there was no aboriginal equivalent for the machete, so that this is a pure addition rather than a substitution of a more efficient modern implement.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

doubtful. Apparently sleeping was not entirely restricted to the hammock among the Cayuá, however, as Rengger mentions children reclining on skins of animals.[a] There is some indication that hammocks were reserved for adults. Hammocks were hung all about the interior of the *tapúi*, in each family section, and could be unslung for extra space during the day.

Every aboriginal *tapúi* had its mortar, and probably most had several of these. Mortars were made of hard wood which had been burned and hacked until there was a depression in the end or in the side: both "vertical" and "horizontal" mortars may have been made, although the "vertical" was much more common.[a] Pestles were either simple, smoothed pieces of wood with rounded ends, or might be tapered in the middle to make a better grip and to lighten them. Sometimes the two pounding ends were different as well, one being regularly blunted while the other was flattened laterally, giving the pestle somewhat the appearance of a narrow, thick spatula.

Long troughs for *cãuí'* beer, cut out of logs in much the same manner as a dugout canoe, were usually to be found by each *tapúi*. Some of the present-day troughs are of great size—as much as thirty feet long and a yard or more wide inside—and it may be that formerly, when every house had its own trough (and without metal tools), they were never as large. The smaller troughs are still to be seen and are usually less than half the size of the largest observed.

Pottery vessels were used which were made by the Cayuá women themselves. The use of these vessels, however, may have been somewhat limited in that gourds could be used for many of the same purposes except direct cooking on the fire. The metal vessels of the European have practically replaced aboriginal pottery, although the use of the gourd still widely persists. Gourds were used to carry water, generally in this case being provided with a coarse net and carrying loop of vegetable fiber. Larger gourds (up to 2 feet in diameter) were used for storing *cãuí'*, tiny ones for keeping paint pigments and herbal remedies, and open half-gourds were used for drinking and eating dippers. The shell of the armadillo made a good container for corn and similar substances. Small gourds were sometimes ingeniously cut so that the top could be used as a close-fitting cover, held tight by cords passing through holes in both parts. Pyrographic decoration of gourds is suggested aboriginally.

Admirably woven, round, flat, sieves of hard, rattan-like material were used for straining *cãuí'* beer and in pounding corn, for separating out coarse grains which needed more grinding. Other basket work seems to have been limited to the woman's back basket, *mbusahẽ'* (or *adjahá*), worn across the

[a] Rengger, 1835, p. 117.

[a] It is possible, however, that the horizontal type of mortar is modern. It is now much used to crush the juice from sugar cane, an operation for which the upright type with smaller basin is ill suited. Sugar cane is, of course, post-contact.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

Cayuá, and diadems, headbands, armbands, and feather collarpieces are mentioned.[85] It may also be supposed that the cotton or *caraguatá* belts, which are now so commonly used and prized by the Cayuá, were also formerly known. Métraux comments, in connection with the use of cotton and *caraguatá* as weaving materials, that the Cayuá are the only Tupi-Guarani tribe to use indifferently cotton and other vegetable fibers for weaving.[86]

The Cayuá loom was the simple upright frame, with vertical posts planted in the ground. The top horizontal piece was laid in forks in the uprights, and the lower horizontal piece was tied to the uprights at the distance required. The warp was usually composed of a single continuous or knotted piece of yarn passed around and around the horizontal loom pieces. No comb or bat was used, apparently, and the woof was put through the warp by hand. The product of the Cayuá loom was a creditable article, nevertheless, and simple dyeing was practiced with several plant colors available. Women were, as they now are, the weavers of the Cayuá.[87]

Fishing lines, and cords and ropes for heavier purposes, were twisted from various vegetable fibers. Some of the ropes were strong enough to hold large animals when these were caught in nooses made from them. Since very early times the Cayuá have used metal obtained from European needles or other sources for fishhooks, so it is difficult to say what the aboriginal article may have been.

Cayuá tools and weapons included the bow and arrow, already mentioned. The bow was round in cross-section, and the arrows were two-feathered. Métraux mentions triple feathering of arrows for the Cayua,[88] but no other suggestion of this has been encountered, and it is not present in modern arrows. Clubs were formerly used by the Cayuá. Notched axes of stone and knives of bamboo are indicated,[89] but it is not known what form of aboriginal hoe or hoe-like implement was used, if any. The digging stick, or *sarakwá*, was the primary agricultural implement aboriginally, and possibly the only one; it is still in use today, not only by the Cayuá but by local Neo-Brazilians.

Cayuá men wore the long lip-stick or *tembetá* ("lip-stone"), which in their case was customarily made of the translucent resin of a certain tree. This ornament and symbol of initiation and a man's status is still in use among some Cayuá, although modern examples appear to be shorter on the average than some of the extremely long ones reported for the past—up to thirty and more centimeters. Face painting for women and children is indicated for the

[85] Métraux, 1928, p. 150. [86] *Ibid.*, p. 232.

[87] The weaving of cotton was one of the household industries of Guarani women of which the Jesuits have made considerable mention in connection with the economic organization of the reductions. Some of this production was apparently sold on the outside, and the priests seem to have made much effort to handicap the industry in their favor.

[88] Métraux, 1928, p. 75. [89] *Ibid.*, pp. 98-99.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

and the axe—the first in particular—to Cayuá agriculture can scarcely be overestimated. It is possible to clear larger pieces of forest at present than formerly, expending both less effort and less time to do so. It is no longer necessary to depend so heavily upon burning and reburning, nor to gather and pile up brush about the trunks of large trees to remove them by fire. With the use of the hoe and machete it is possible to keep crops freer of weeds; a clean *kokwé* is now largely a matter of the industriousness of its owner. Formerly it was much more difficult or technologically impossible to weed frequently.

Machetes are the most important metal implement of all, for agriculture and for many other applications. Practically every adult male owns at least one machete, though it is usually a poor one, much diminished by resharpening or breaking of the point. Old machetes are relegated to household use when they become too small for field work (and this must be very small because some men are obliged to continue to use knives worn or broken down to no more than a foot in length). In the household they are used to pull roasted tubers from the fire, in the preparation of food, and the like. The old machetes are also used by the women for short digging implements in getting food from the *kokwé*.

Not everyone owns a hoe or an axe, but axes seem to be the second most essential (and the most expensive) metal implement. Borrowing is usually possible, or the machete is simply made to do instead. Axes are primarily used in fetching and splitting firewood—although a machete will serve up to a point—and in felling the larger trees in the forest for clearing a *kokwé*. Felling the largest trees is very heavy and difficult work and usually impossible with a machete. The hoe is entirely restricted to agriculture, whereas axes and machetes both may be used in housebuilding and honey gathering, and machetes are also employed in certain kinds of hunting—usually with dogs—and other activities. The hoe is used in weeding and in opening holes for planting certain crops. Women have more to do with hoes than with either of the other white-introduced tools, which are generally considered implements of male use.

In agriculture, practically the only aboriginal implement remaining today is the digging and planting stick, or *sarakwé*. Corn, especially, is always planted with the *sarakwé*, and the implement actually has much to recommend it in the log and stump-strewn *kokwé*. The *sarakwé* is primarily, if not exclusively, an implement of female use. Bamboo knives, aboriginal implements, though possibly not used in agriculture, have fallen into general discard except in their ritual use in severing the natal cord of the newborn infant—an example of conservatism of technology associated with ritual practices.

Before leaving the subject of metal tools introduced by way of acculturation, mention should be made of the use of the machete in modern housebuilding. Most obvious is the present wide-spread use of a type of "board" made from large trunks of *taquara* bamboo, split open and flattened in a man-

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

ner which could hardly have been possible without the machete. *Taquara* "boards" have no convenient application in connection with the older style of house, the *tapái*. But they are more often than not used in building the smaller, individual family houses of the present day, which are peculiarly adapted to their use (see below, pp. 84–85).

The use of canoes by the aboriginal Cayuá has been mentioned, although it is not borne out by their employment or manufacture at the present. If canoes were formerly used, the lack of them now would seem in some way related to acculturation and hence deserves mention here. Without canoes, the Cayuá do not travel extensively by families or groups. What travelling they do is done on foot—or individually by horse, in the case of a very few who own them. Although they may have been only slightly less sedentary aboriginally than now, it is probable that with canoes the Cayuá were formerly able to range much farther afield (or astream), using their villages as bases.

The ceramic art barely survives at Taquapiri. None of the younger women is learning to be a potter, and there are only four remaining potters among the oldest women. Of the four only two have recently made or intend to make any pottery in the near future, and even with them its manufacture is very irregular. Many of the girls and young women have never even seen pottery being made nor apparently expect to. The iron kettle and the tin can have almost entirely usurped the former place of pottery, and by far a majority of the households possess no pots of clay whatever. The woman's pipe, formerly of either wood or clay, tends to be of wood alone today. The conventional water gourd, and gourds and armadillo shells for other types of containers, however, have not declined in use. As a matter of fact, the gourd as a water vessel is quite practical and is to be found in not a few of the Neo-Brazilian households of the region. This continued use of gourds may derive some indirect advantage from the fact that gourds are also raised for use as *mbowáda*, ceremonial rattles, which are far from waning in importance.

Men's carrying bags or containers for personal objects, *mbokói* (?), differ from the aboriginal ones; nor are they now usually objects of the native weaver's art as formerly. Men's double carrying bags of store cloth, something like small saddle bags, are slung over the shoulder, with one pocket hanging in front and one at the back. They constitute an exclusively male method of carrying, but are only occasionally worn, however. For small personal objects the only container observed was a little leather pouch, probably Cayuá-made, fastened at the belt, and used by boys and men.

Clothing, except for men's belts, is now entirely of store cloth. It is home sewn (with trade needles and thread), and the styles are typically Cayuá. Presumably they reflect the style of army uniforms at one time issued to the Indians. Thus men's trousers are apparently modelled on original military or riding breeches, since forgotten, which fit closely at the knee. Even in the

3: Watson E-4,5 (1943) 1952 SM4 Guarani SM4

177 243 [173] are consistent to a certain degree with their contention. They say that the gods do not approve when large quantities of flint corn are planted and smaller quantities of the flour type, which is a divine gift. In spite of going this far, however, it is quite obvious that Cayuá now do sometimes plant more *tupi'* than *monoñ'*, intending the greater harvest largely for sale. Cutler says, "The flour types appear to be the older form."[116] It is possible, therefore, that the Cayuá have grafted onto some aboriginal distinction between an older and supernaturally sanctioned flour corn (*monoñ'*) and a more recent flint type (*tupi'*) the modern rationalization that the latter is white-introduced. The present trading association of hard corn may also have had some influence. In any event, it is clear that some few plants have been introduced to Cayuá agriculture by acculturation and that the aboriginal production ratios between one crop and another have been somewhat changed as a result of white influence.

177 178 224 226 Hunting and fishing have changed less than agriculture but a few acculturational features are to be noted. In fishing, white-introduced metal hooks are used for angling. Machetes are now often used when hunting with dogs; clubs have presumably given way to machetes in this and have disappeared altogether. Firearms are known, and a very few Cayuá possess them.[117] The bow and arrow is the missile weapon used by the largest number, and it does not seem to have suffered basically, either as to variety of arrow points or as to the knowledge of its use, from acculturational change.

177 178 222 412 415 Technologically, gathering has been largely unaffected and also probably has been little influenced by acculturational factors as to its importance in the total economy. In honey-gathering the machete and axe have provided some advantage over any conceivable aboriginal method. These metal implements are used to cut open the trees or stumps where the wild bees make their nests. Kerosene cans and *aguardente* (Brazilian alcoholic drink made of cane juice) bottles are now also found convenient for catching and storing the honey.

224 226 433 Although apparently little affected by acculturation as to technology, the non-agricultural forms of food production are now completely subsidiary. In some respects hunting and fishing theoretically may now even be dispensable. Practically every able-bodied Cayuá man (and woman, within the limits of her status) is an agriculturist. But many men do very little hunting or fishing. Even the motives for these lesser activities are now somewhat special and include the desire for variation of activity and for relief from the largely vege-

[116] *Ibid.*

[411] [648] [117] In 1943 only one person at Taquapiri had a firearm usable for hunting, an ancient Belgian shotgun, for which he sometimes bought powder and shot and loaded his own shells. A story was current among the Cayuá at that time that "the Government" had issued an order for all firearms to be taken from the Indians. Apparently certain local whites had "cooperated" in this, taking the arms for themselves.

3: Watson E-4,5 (1943) 1952 SM4 Guarani SM4

Trade with Neo-Brazilians

Since there are no records, it is difficult to say exactly how long trade relations with whites have existed. Their beginnings certainly go back as far as the first white goods given to the Indians in exchange for food or for work in the *maté* groves; that may be 200 years ago. The volume of trade between Cayuá and Neo-Brazilian has probably not been important, however, until the last twenty years or so, and until even more recently the Cayuá have found no regular market for anything but their labor.

At the present time there are two aspects of Cayuá-Brazilian trade relations: (a) the Cayuá receiving white goods and (b) the Cayuá trading small amounts of their produce to the whites. We shall consider these separately, though they are, of course, closely related. Some Cayuá now obtain store goods outright, paying in money or bartering for them. Many more work as peons for *patrões*, and the latter themselves obtain from the *bolichos*, or trading posts, small stocks of trade goods of the type that find favor among the Cayuá. Indian demand for trade goods is at least of sufficient volume in most cases to lead the traders to stock special merchandise. The Cayuá either prefer this merchandise because of lower price, because of different tastes and lack of discrimination, or they become victims in having the merchandise palmed off on them. Examples of such special "*bugre*" (pejorative term for "Indian") merchandise are an inferior grade of cord tobacco which none of the settlers would use (because it was for Indian consumption, perhaps, if for no other reason), garish colored materials for clothing, tools of inferior quality, and outlandish men's felt hats.[188] But whatever the shoddy merchandise they are obliged to accept, and however much they may sometimes be cheated in their dealings with Neo-Brazilians, there is no mistaking that the acquisition of trade goods is now very important to the Cayuá.

There is a sizeable list of goods which the Cayuá obtain entirely from Neo-Brazilians, and these they seem to feel are either indispensable or at least are goods without which they could not conveniently get along. They include cloth, thread, needles, occasionally a pair of scissors (not every family has a pair), salt and rough cake sugar, soap (for washing clothes primarily, although native plants are known of which the saponaceous roots can be used), tools (principally agricultural), and iron pots and metal basins. Some meat and "lard" (usually tallow) are occasionally acquired, though trade in these items is not very regular—even less so away from Brazilian villages large enough to afford a butchery. The most frequent source of meat and lard is the *patrão*

[188] Among the Cayuá in 1943 there were none but machetes of Brazilian manufacture, very poor—little better than iron; implements no Brazilian would use if he could avoid it. The better grades of imported tools, Collins (American) and "*Jacaré*" (Birmingham) were not unknown among the white settlers. However, the apparent conclusion is that the Indians are in no position to obtain the best, even more so when the best is in short supply.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

causes are largely to be recognised in the effects to which they are related and which are their expression and will thus become clear in the discussion of their respective acculturational effects. Other than convenience or chance, there is no special reason for the order in which the various factors have been listed in each class. (We shall include in parentheses, each time we first mention any factor, the numeral-letter key to its location in the chart.)

PRIMARY EFFECTS OF ACCULTURATION

II. A. a. "Agriculture becomes more important in the total economy of the Cayuá." Several factors have contributed to this effect, and the relationship is quite plain in most cases between these factors and the trend toward a larger scale agriculture. The guarantee of freedom from attack and from the need of recourse to arms (I. a.) permitted the Cayuá to devote more time to other pursuits and particularly to depend more heavily upon agriculture. A fixed source of food, of course, is a liability when retreat and destruction are in prospect. The modern Cayuá could develop and maintain their *hohod* on a scale which would have been impossible under the necessity of being ready to abandon them hurriedly. No longer did they have to conceal them by making clearings small and inconspicuous in the forest so as to escape hostile notice.

A different influence, but with much the same result, is (I. b.) the introduction of metal implements such as the machete, hoe, and axe which facilitated agriculture technologically. These implements enabled the same amount of work as before to be done better in less time—and probably with a smaller expenditure of total effort. Thus, so to speak, there was, in comparison with the past, a "surplus" of time to be used in other activities or in more extensive agriculture. Since the most important other activities of men, hunting and fishing, were concurrently becoming less practicable, or at any rate demanding less time (as we shall see in II. A. b. below), there would obviously be a tendency to turn to the increased agricultural production of food. The heightened efficiency of the agricultural technology in turn made such a prospect less arduous.

The territorial restriction of the Cayuá and their final location upon relatively small reservations (I. c.), of course, favored agriculture; it became necessary to curtail economic activities, such as hunting and fishing, that depended upon greater mobility and a wider territory of exploitation. Agriculture remained practically the only possible direction in which Cayuá could compensate for their consequent economic losses. In a sense, then, we see here the reverse of the presumably usual relation between sedentarism and intensive agriculture. Generally sedentarism comes about "naturally," one supposes, but in the Cayuá case it was increased and enforced politically from outside. Thus, instead of resulting from intensive agriculture, the fixation of territory tended rather to bring that intensification about.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

*177 182 648 22 the presence of many more people in the region, principally whites, who have more efficient hunting techniques. The whites also graze considerable numbers of cattle. Inevitably the ecological balance has shifted to the disfavor of the wild animals. Hunting has become less possible because there is less to hunt. Precisely what the presence of domesticated grazing animals in large numbers may have meant to the prospects of plant gathering, on the other hand, is not quite certain. In a region like the intermontane area of North America gathering, rather than hunting, was of primary importance, and the wild plants gathered were such as to be accessible and edible to grazing animals. The outcome of the introduction of livestock in that instance was both predictable and serious for the aborigines. But many of the wild plants gathered by the Cayuá are tree-growing fruits; many lower growing varieties are plants of the forest where cattle are not so apt to graze. It may consequently be doubted that cattle have had a great deal to do with any decrease in plant gathering activities of the Cayuá.[136]

*177 182 241 22 Broadly and indirectly significant in the declining importance of hunting and fishing (and gathering?) has been the increase in scale of agriculture, (II. A. a.). These two large changes apparently stand in a fairly close inverse relationship to each other. As hunting and fishing decreased, agriculture increased, and to a certain extent one result can therefore be said to have been a cause of the other, though of course we are dealing here with no "closed" causal system. Had there been no feasible alternative to the dependence upon hunting and fishing, such as agriculture, it may be doubted that they would as readily have given way before acculturational forces operating against them—or the present economic situation of the Cayuá might not have been such a relatively well adjusted one. In this sense, then, factors ultimately favorable to agriculture have indirectly contributed to the deterioration of non-agricultural food technologies; and conversely, factors unfavorable to hunting, fishing, and possibly gathering, have indirectly contributed to the modern importance of agriculture to the Cayuá.[137]

*177 182 241 •412 II. A. c. "Greater present technological efficiency and productivity of the individual worker in agriculture. It is possible not only for more agricultural

[136] The cattle, and in a few cases swine, present something of a problem to the Cayuá agriculture, however. Those living near open country where cattle graze must make the trails to their *kaiová* obscure and difficult and must build gates or other barricades. Otherwise the cattle may invade the plantations and cause large scale depredations, as certain wild animals always have done. The latter, however, may be trapped and killed whereas the cattle of the Neo-Brazilians may not.

[411] [137] An instance in which this has not been wholly true, however, is that of the introduction of metal implements. The machete has developed into one of the most commonly employed hunting weapons for certain small game such as armadillos, substituting for the club, reported by some authorities as in use by the aboriginal Cayuá. At the same time time, of course, the machete has been a notable factor in enhancing larger scale agriculture.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

work to be accomplished but for the individual to do it single-handedly." The efficiency of the modern Cayuá worker in agriculture has but a single important acculturational cause (I. b.), the introduction of metal cutting implements. Particularly important are the machete, the axe, and the hoe, as has been mentioned. Compared with whatever aboriginal substitutes, there can be little question of the much greater efficiency of these metal tools. 177* 182 241 412

In some sense, however, the several factors making for an increase in agriculture were generally influential here; otherwise there might have been no occasion for the individual to increase his agricultural efficiency and productivity. Obviously the relationship is close, and the distinction herewith of a separate item, the efficiency of the worker, must be justified by its later application in the analysis. 177* 182 241

II. A. d. "A loss or diminution of certain native industries." The loss of native industries is a common acculturational effect, and there are a number of common causes. The primary cause in the Cayuá instance is (I. e.), the introduction of trade goods. Particularly significant have been trade goods which will substitute adequately for aboriginal handicraft products. Among these, for example, are the iron pots, bottles, and tin cans which have so successfully all but killed the native ceramic industry. Weaving has suffered much with the introduction of machine-made textiles, obtainable at the *bolichos*, and has been handicapped also by the change to clothing styles for which store cloth is more adaptable than aboriginal loomwork. 177* 182 439 [415] [323] [286]

At the same time, some white trade items, such as (I. b.), metal tools, have had a contrary effect. Knives and machetes particularly have made certain crafts easier, largely crafts where cutting or splitting processes are important. This is evident in the preparation of vegetable fibers for weaving and tying, or the splitting of rattan for baskets and strainers. Such technological improvement, however, has not appreciably counteracted the decline of native industries whose products find ready trade goods substitutes. [412] [322] [285]

By extension, factors which have enhanced trade relations between the Cayuá and the Neo-Brazilians have contributed to the loss or decrease of native industries. Aboriginal handicraft industries have thus been adversely affected by (I. f.) the growth of an external market for male Cayuá labor. Moreover, besides providing one more way in which the Cayuá may obtain trade goods substitutes, the *changa* (II. A. e.) in many cases occupies a great deal of work time. Frequently much of the time remaining after his own agricultural work is completed is used by the Cayuá in *changa* for local whites. The *changa* thus occupies some of the time formerly devoted to handicrafts. [464]

The development of a small market for certain Cayuá products, including craft items, has also influenced the status of Cayuá handicrafts. The effect of a market (I. g.), however, has been to some extent ambivalent. On the one hand, the modern emphasis, in agricultural production, of a surplus which can

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

why should men take over more of the work of agriculture than formerly? Conceivably they might merely enjoy more leisure hours, since they no longer hunt so much; why necessarily increase their agricultural burdens, other things being equal? "Other things" were not equal in the Cayuá instance, to be sure; nor are the basic factors necessarily the same from one culture to another. For example, underlying cultural assumptions as to the normal or desirable, and therefore "just," economic contribution of the male, compared to his spouse, may vary widely. In some cases these assumptions may account for the male changing to produce agriculturally what he ceases to produce in hunting or fishing. In other cases, perhaps, no such reason or motivation may prevail. In Cayuá culture prevalent ideas about the economic obligations of men, as compared with women, may well have had a part in male compensation through agricultural production for decreasing hunting and fishing production.[180]

At least two specific factors appear to be historically related to the present Cayuá sexual division of labor in agriculture. Let us look first at (I. b.) the innovation of metal implements so important technologically to the increased scale of Cayuá farming. The alien machete and the axe were received from white men; men, that is, were the sex whom the Cayuá first saw using these tools. The Cayuá did not see much of the women of the invader probably for some time, and in any case, white women have very little to do with the machete and the axe. Cayuá men were by far the sex most in contact with the alien society and culture at first; even at present it is men who still primarily have to do with whites, since the *changa* and trading are both eminently masculine activities. Not only were Cayuá males in a better position to do any borrowing, therefore, but it is scarcely conceivable that the new metal tools could have come into Cayuá culture with other than connotations of masculine use.[181] The crucial significance of the new tools in the expansion of agriculture, added to the male use and connotations of the tools themselves, would seemingly favor the increasing agricultural role of men.

The growth of the *changa* (II. A. e.) may also have favored an increasing masculine role in Cayuá agriculture for the work of Cayuá men in the *changa* is generally agricultural work. Operations in wage-work are performed with the same metal implements which are now in use by the Cayuá. Thus, at some

[180] A suggestion of the values of Cayuá culture on this point is the report among the Coastal Tupi of the husband's economic obligations to his wife's people. Obligations of "bride service" existed among the Tupi unless they were "cancelled out" by reciprocity of spouse-giving within the terms of the kinship system. Such a practice, as we have said, is not authenticated by documents for the Cayuá but seems likely for a number of reasons. It indicates something about the general economic role of men.

[181] Here is certainly an excellent case in point for the analysis of "types of contact" of Herskovits, Redfield, and Linton. The question is whether the contact is of immigrant men, and what elements of culture are thus likely to be made available by the special alien group to the indigenous people among whom they live (Herskovits, 1938, p. 132).

/32 cont./
177 made up of those who have spent a large part of their lives out-
178 side of the Indian aldeias, having lived in closer contact with the
197 whites, speak and know only the modified type of the language,
361 admitting that they have difficulty at times in understanding the speech of some of the older ones. I found very few of these cases.

361 Taquapirí, the aldeia under consideration in this article, is
[101] located in the Federal Territory of Ponta Porã, between the Brazilian settlements of Uniño and Nhu Verá, about two leagues
[161] from the Paraguayan border. At present about 175 individuals are
[628] counted in the aldeia, many of them relatives and friends of other Cayuá of the various groups of these Indians in the region, such as the Posto Índigena "Benjamin Constant," Mangaí, Iguassuí,
178 Ipeum, and Pirajuí. The Cayuá nowadays devote themselves
433 intensively to agriculture, making large clearings, and devoting little time to hunting or fishing. Von Koenigswald states that at the beginning of the twentieth century, the period in which he traveled through the /33/ region, the same was not true. "Every Indian village maintains a small clearing with maize, mandioca, gourd, sweet potato..." (4).

4. Ibid., p. 7.

178 About 40 or 50 years ago, more or less, the restrictions with which
131 the whites reduced the area of land that the Indians can use were becoming more accentuated. Today the Indians of Taquapirí
423 are limited to a territory which is not watered by rivers that con-
648 tain a large amount of fish and which does not have forests with plentiful game either. This progressive diminution of the Indians'
[175] territory remains alive in the memory of part of the older men of the group. The introduction of the machete to this group, an
174 event that took place at least in a period much earlier than the
177 reduction of the Indians' territory on the part of the whites and
412 which was going to facilitate the opening of the clearings in the forest, constituted another important factor of the change observed
313 in the economy of the Cayuá /The index number for footnote 5

175
•412 /33 cont./
177 is missing in the original text./
313

5. Ibid., p. 5.

121 The discussion of the kinship system of the Cayuá can be divided into two distinct parts, kinship terminology and kinship behavior. The kinship behavior will be discussed first in terms of the life cycle and then in terms of reciprocal behavior.

Kinship Terminology

128 The charts I, II, and III[1] represent diagrams of the kinship
601 terminology of the Cayuá. Portuguese terms /translated into English for Chart I/ are used in these diagrams for simplification. The Cayuá terms are brought together in Chart IV.[2]

601 The kinship system is classificatory, since the relatives of the lineage and the collateral ones are put together in the same class. The father's brother is classified with the father, and the mother's sister is classified with the mother, while the mother's brother and the father's sister are designated with distinct terms. The grandparents are distinguished only according to sex, and the terms that denominate the grandparents are also extended to their "siblings" (6).

6. "Siblings" are brothers and sisters who have the same mother and the same father.

All the grandchildren are put together in one class without any distinction, not even as to sex. In the generation of Ego the older brother is distinguished from the younger brother, and the older sister from the younger sister. These designations are extended to the /34/ parallel and cross cousins. The brother's children are son and daughter in the words of the man, and nephew and niece in the words of the woman. All the children of sons and daughters and nephews and nieces are grandchildren.

[1] [pp. 20 and 21 of translated text--analyst]
[2] [pp. 22 and 23 of translated text--analyst]

5: Métraux E-4 (no date) 1948 SM4 Guarani SM4

dictator, Francia, ordered the destruction of the five missions south of the Paraná River. The 15 missions between the Paraná and Uruguay Rivers were abandoned during the war of 1816–18. The *Guaraní* who were not slaughtered settled in small villages, often near the ancient missions. In 1848 the dictator of Paraguay, Carlos Antonio Lopez, suppressed Bucareli's regime and forced the 6,000 *Guaraní* who still occupied missions to live in ordinary villages like the remainder of the Paraguayan population. The last vestiges of the Jesuit system disappeared after that date.

The Jesuit missions of Paraguay have been the subject of considerable controversy concerning their alleged communistic organization.

CULTURE

SUBSISTENCE ACTIVITIES

The early *Guaraní* seem to have been proficient horticulturists, perhaps superior to their modern descendants, the *Caingué*, who are said to be unable to subsist entirely on the output of their small fields. Like the *Tupinamba*, the *Guaraní* supplemented their diet with all kinds of wild fruits, and with game and fish.

Farming.—The whole community, among both ancient and modern *Guaraní*, cooperated in clearing a large field by the slash-and-burn method in a thick forest and then subdivided it into family plots. Planting and sowing were regulated by the course of the Pleiades. The main agricultural tool was the digging stick. After five or six years of cultivation fields were considered exhausted and were abandoned.

Most plants typical of the Tropics, except cayenne pepper, were raised by the *Guaraní* and are still grown by their descendants, the *Caingué* and the Paraguayan Mestizos. Manioc, mainly the sweet species, and maize are the staples. The *Caingué* cultivate manioc, maize (5 varieties), several varieties of sweet potatoes, beans, mangara (*Xanthosoma* sp.), a tuber called carahu (*Dioscorea* sp.), a leguminosea called mbacucu, peanuts, pumpkins, bananas, papayas, and watermelons. They also grow an herb (*Nissolia* sp.) for curing serpent bites, and two shrubs (*Rhamanidium* sp., and *Coix lacryma-jobi*), the seeds of which serve as beads. The *Pai'* and *Chiripá* raise tacuapi reeds, or caña de Castilla (*Arundo donax*), for their arrow shafts. The *Caingué* are very fond of sugarcane, which is for them a delicacy.

Gathering wild foods.—The *Guaraní* of the southern Brazilian plateau consumed great quantities of pine nuts (*Araucaria brasiliensis*), which are abundant in that region.

The modern *Caingué* subsist far more than did their ancestors on wild plants, especially pindo palms (*Cocos romanzoffiana*). This tree not only provides them leaves for making baskets, but also with vitamin-rich terminal shoots, with juicy fruits, oily nuts, and pith which the Indians

5: Métraux E-4 (no date) 1948 SM4 Guarani SM4

They crush the pith of the palms in a mortar, strain it through a sieve, and dry it in the sun.

Meat is more often broiled on a spit than on a babracot. Broiled fish and game are sometimes ground into powder (piracui).

Cainguá do not use salt. Instead they season their food with the ashes of a tree (*Machaerium angustifolium*).

Wooden mortars are generally made of a long log hollowed at one end, but some have the grinding pit on the side. Flour is strained through beautifully plaited sieves, identical to those of Guiana, although Paraguay is the southernmost limit of their distribution. When the *Cainguá* have no pottery at hand, they boil food in green bamboo joints. They serve food in wooden dishes or in calabashes of various sizes and shapes.

VILLAGES AND HOUSES

A typical *Guaraní* village consisted of four to eight large rectangular houses—some about 50 m. (165 ft.) long—grouped around a square plaza. Each house had a vaulted or gabled roof which rose from the ground and was supported on a ridge pole that rested on a row of posts dividing off the quarters of each individual family. The roof was thatched with grass, palm leaves and, in certain regions of the coast, with pieces of bark. There was a door on each side of the house. Villages were fortified with a double or triple stockade and a series of moats, bristling with half-buried spears.

The vaulted hut has survived only among the *Paĩ'*. Other *Cainguá* now build either a gable roof resting on the ground and thatched with tacuapi grass, or palm leaves, or a gabled house with vertical wattle-and-daub walls (4 to 6 m., or 13 to 20 ft., long; 3 to 4 m., or 10 to 13 ft., wide). Grass thatching is sewn to the structure with large wooden needles. Of all the modern *Guaraní* only some *Cainguá* of Brazil still lived in communal houses 50 years ago. These houses were 25 to 50 feet (7.5 to 15 m.) long and were grouped in villages surrounded by a thorn hedge or a palisade.

Household furniture.—The aboriginal cotton or palm-fiber hammock is now being supplanted by the platform bed or sleeping mat. Four-legged benches, which are often carved out of a single log in animal shapes, are still fairly common. Utensils and foods are stored on shelves suspended from the roof or are hung on wooden hooks or on bent deer feet.

DRESS AND ADORNMENT

Clothing.—Most of the *Guaraní* went entirely naked, although in certain regions, it seems, women wore either a loincloth or a cotton dress (the tipoy), a sacklike garment covering the body from the breasts to the knees which was eventually adopted universally through missionary influence.

5: Métraux E-4 (no date) 1948 SM4 Guarani SM4

178 a [illegible] Vogt, 1904, p. 203). Today the number of Indians under the
622 auth[illegible] of a chief vary from 20 to about 100.
621 The members of the ancient *Guaraní* communities built the houses of their chiefs and tilled their fields and harvested their crops (Ruiz de Montoya, 1892, p. 49).

685 **Law and order.**—It is only about modern *Caingud* communities that
756 there is some information on justice and law. Thieves are detected by
695 shamans, who touch each suspected man on the chest near the heart. If
684 the fingers leave a red mark, the man is guilty. A stolen wife must be
682 returned with a present. In case of murder, if the criminal's relatives do not pay the wergild to prevent a feud, the offended family takes the punishment into its own hands.

576 **Etiquette.**—Among ancient *Guaraní*, when a guest entered a hut, he
574 was surrounded by women who wailed and enumerated the deeds of his dead relatives. The guest covered his face with his hands and shed a few tears. The amount of crying and wailing was proportionate to the importance of the visitor (Ruiz de Montoya, 1892, p. 52).

LIFE CYCLE

843 **Birth and naming.**—Even in modern days, a pregnant woman must
846 avoid any food that might make her child abnormal. After childbirth, the father lies in his hammock until the infant's navel cord falls off, re-
842 fraining from activities thought harmful to the baby. The *Apapocuva*
775 believe that babies are reincarnated dead people, hence one of the shaman's
756 first tasks is to identify the returning spirit and, by means of his super-
789 natural power, to obtain a magic substance to be rubbed into the child's
851 body. Infant baptism, though Catholic in many respects, is permeated
177 by ancient rites and beliefs. Names refer to mythical beings or to sacred
178 objects associated with the place on the horizon from which the soul is
551 supposed to have come. Children may be very closely identified with
77 the deities of the Upper World, and those from the west, the abode of Tupã, may receive a miniature of the bench symbolic of their divine name-
553 sake. In case of danger, especially if a person is sick, his name is changed
851 and a new ceremony of baptism is performed (Nimuendajú, 1914 a, pp. 302–303).

881 **Boys' initiation.**—A *Caingud* boy undergoes something of an initiation rite when, prior to puberty, his lower lip is perforated for the insertion of
[273] a labret. After a group of boys has been somewhat anesthetized with beer,
[412] a specialist perforates each boy's lower lip with a wooden or deer-horn
[237] awl and prays to Tupã that the labret may protect its wearer against death.
[293] For the three following days the initiates eat only maize mush. After
[195] their initiation they drop the infantile "u, u" (yes) for the adult masculine "ta."

6: Watson E-4,5 (1943) 1945 SM4 Guarani SM4
Cayua

under certain conditions. Some activities in the agricultural work of the *roça*, nevertheless, are preferably if not necessarily performed by the women.

Very important as a strictly feminine contribution to the economy is the woman's part as the producer of *chicha*.[9] The *chicha*-maker is important to the economy in two ways: *1)* the *chicha* which she produces is consumed as a beverage, doubtless has nutritive as well as socially ascribed value, and is therefore a "good"; and *2)* her *chicha* is essential in the system of reciprocal joint labor. After every work party, the wife or some close female relative of the man for whom the others have worked offers *chicha* which she has made. Cayuá *chicha*-making is in a certain sense, of course, only a rather specialized aspect of cooking. *Chicha*-making is today closely related to agricultural activity and the drink is made from agricultural products, corn, potatoes, manioc and sugar cane juice. Its present *use* and *function* in the agricultural round of things is unmistakable.

Historic Influences on Cayuá Culture

In general outline, the influences which have played upon the culture of the Cayuá during recorded history, at least within the period with which we shall be concerned in this paper, are very similar to influences upon indigenous culture elsewhere in the Americas occasioned by the coming of the Europeans. They are: *1)* the introduction of metal tools and the other common trade goods of expanding European civilization; *2)* more and more direct contact of the white settlers with the indigenous peoples bringing with it varying results; and, finally, *3)* the restriction of territories and the dislocation of the people from their former territories, with the frequent and logical result of such a trend, establishment on reservations.

The Jesuits, 1610-1768

Very little can be said here about what may have been the influences upon the Cayuá of the Jesuits with their missionary set-

[9] "Chicha" is the Spanish and the Portuguese word as employed by the Cayuá. Their own word for this beverage is ca° wi°.

6: Watson E-4,5 (1943) 1945 SM4 Guarani SM4
Cayua

175 Koenigswald,[27] emphasizing the reticent nature of the Cayuá in seek-
722 ing the deepest recesses of the forest in an effort to keep out of harm's
182 way, states that it was not only the whites of whom the Cayuá were afraid but also other hostile Indian tribes, including especially the Mbaya.

177 It does not seem necessary to dwell upon the difficulties of agri-
241 culture with reference to a group which lived in constant fear of enemies and in constant readiness to abandon on short notice any
648 given residence for another.[28] The coming of the whites and the
182 stabilizing influences which they doubtless brought, at least as far
[667] as reducing open warfare is concerned, culminated finally in the establishment and reservations in recent years, not only of the Cayuá, but also of the Guaycurú peoples themselves.[29] This served to remove at least one difficulty in the way of an increase in Cayuá agriculture.

177 A more positive force making for the development of Cayuá agri-
241 culture is that of an improved agricultural technology made possible by the *tools* which the Indians received from the Europeans and upon
• 412 which they have come to depend so completely today. It is difficult
182 to imagine what Cayuá agriculture might be like without the *facão* or *machete*.[30] This tool is used to fell trees — even reasonably large ones if no ax is available, to dig, to clear underbrush, and to plant. It is the *sine qua non* of Cayuá agricultural technique today and could, conceivably, supplant in the technology every white-introduced

[27] *Op. cit.*

[28] The impression that Rengger gives of the Cayuá agriculture of the time of his visit is very much like that of the agriculture of the semi-nomads of the Malay peninsula with their slash-and-burn technique, their very irregular planting of fields, only to leave them during the growing season and count upon reaping some small portion of the harvest upon passing that way at a later time, during the season of fruit-bearing. It is not difficult, either, to believe that present-day Cayuá agriculture had its origin in such a system: many Cayuá roças still present an aspect, especially when new and just cut and burned from the mata, quite reminiscent of that which Rengger describes. But, in general, Cayuá agriculture of the present is on a much larger scale, roças are much better made and kept, and the whole presents a more settled and permanent appearance.

[29] E. g. the Caiuvas of the S.P.I. post "Bananal" in Matto Grosso.

[30] *Facão* is the Portuguese word; the Cayuá, living as they do, surrounded as much by influences from Paraguay as by Brazilian influences, usually say "machete" but with a soft or Portuguese "ch". The effect is roughly that of the average English speaker pronouncing the Spanish word.

6: Watson E-4,5 (1943) 1945 SM4 Guarani SM4 Cayua

instrument. This large hand-knife, from 16 to 20 inches long, is commonly used even to "weed", that is, to cut down jungle vegetation to the level of the ground. No primitive tool similar to the *machete* appears to have existed, as probably did in the case of the metal hoe. Earlier hoes and axes are known, and the Cayuá still have vague traditions of bone and stone, respectively, having been used as materials for the implements of their ancestors or their more backward neighbors. In the older technology these less adequate proto-types doubtless were made to serve for many of the tasks that the machete performs at present. But without the machete today the Cayuá would be seriously handicaped in clearing land for farming.

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Individualization

The agriculturalizing of Cayuá economy may also have led to the individualizing of it, in that it seems to have tended to decrease the ratio of joint or communal activity to individual work activity. One indication of this trend may be in the fact, already mentioned, that *timbó*-fishing has been abandoned, while ordinary fishing on the part of individuals has continued, at least on a limited scale. *Timbó*-fishing was, of course, carried on in groups because of the extent of the job to be performed. It is quite true that the abandonment of the *timbó* technique may have been due merely to the fact that progressively less attention was given by the Cayuá to hunting and fishing, but this need not disqualify it as an aspect of decreasing joint action. The point is that joint activity may have decreased in relation to individual activity because of different needs introduced by the change in economy; we certainly do not think that increased agriculture brought with it, *ipso facto*, a tendency toward individualism in thinking and behavior which made continued joint activity less and less agreable to the Cayuá. Under different conditions, for example, joint activity might have been increased with an increase in agriculture.

178 476 156 (226)

Another suggestion of the trend toward economic individualization is found in the description given by Rengger of a Cayuá roça of his day:[21] that a roça was cultivated by the members of a single household for whom it constituted their source of food, as far as agriculture

592 156 178 476

[21] *Op. cit.*, pp. 123-4.